

SECTION V
MARINAS AND RECREATIONAL BOATING CATEGORY
FIVE-YEAR IMPLEMENTATION PLAN
July 2003 through June 2008

A. MARINAS CATEGORY MMs AND ISSUES OF CONCERN

The SWRCB, CCC, and other State agencies have identified 16 MMs to address Marina and Recreational Boating Category (Marinas) sources of nonpoint pollution, as listed in Table VA, below and further described in Appendix II of this document.

Table VA
MARINAS CATEGORY MMs

MM#	Marinas MM Title
4.1	Assessment, Siting and Design
A.	Marina Flushing
B.	Habitat Assessment
C.	Water Quality Assessment
D.	Shoreline Stabilization
E.	Storm Water runoff
F.	Fueling Station Design
G.	Sewage Facilities
H.	Waste Management Facilities
4.2	Operation and Maintenance
A.	Solid Waste Control
B.	Fish Waste Control
C.	Liquid Material Control
D.	Petroleum Control
E.	Boat Cleaning and Maintenance
F.	Maintenance of Sewage Facilities
G.	Boat Operation
4.3	Education and Outreach
A.	Public Education

Because marinas are located at the water's edge, pollutants generated from marinas and boats are less likely to be buffered or filtered by natural processes. When boating and related activities (e.g., marinas and boat maintenance areas) are poorly planned or managed, they may threaten the health of aquatic systems and pose other environmental hazards. The USEPA (1993) identifies several sources of pollution associated with marinas and boating activities. These sources include poorly flushed waterways, pollutants discharged from boats (recreational boats, commercial boats, and "live-aboards"), pollutants carried in stormwater runoff, physical alteration of wetlands and of shellfish/ other benthic communities during construction of marinas, ramps, and related facilities, and pollutants generated from boat maintenance activities on land and in the water.

Effective implementation of the 16 MMs can avoid impacts associated with siting marinas and boat maintenance areas, ensure the best available design and construction practices as well as appropriate operation and maintenance practices and encourage the development and use of effective pollution control and education efforts. The Marina's MMs cover the following operations and facilities:

- Any facility that contains 10 or more slips, piers where 10 or more boats may tie up, or any facility where a boat for hire is docked;
- Any residential or planned community marina with 10 or more slips;
- Any mooring field where 10 or more boats are moored;
- Public or commercial boat ramps; and
- Boat maintenance or repair yards that are adjacent to the water and any Federal, State or local facility that involves recreational boat maintenance or repair on or adjacent to the water (Typically, boat yards are separate entities from marinas and are regulated under NPDES Stormwater regulations and permits to control point sources of pollution).

B. RELATION TO OTHER STATE, FEDERAL AND LOCAL PROGRAMS:

1. Commercial and Military Ports

Commercial and military ports are not targeted in this Program Plan because they are subject to the storm water NPDES permits regulating industrial and construction activities. Commercial ports are also required to submit a port master plan (PMP) for certification by the CCC. The PMP must include the conditions contained in Coastal Act section 30711. An NPS-condition is "an estimate of the effect of development on habitat areas and the marine environment, a review of existing water quality, habitat areas, and quantitative and qualitative biological inventories, and proposals to minimize and mitigate any substantial adverse impact." Section 30711 further states "each city, county, or city and county which has a port within its jurisdiction shall incorporate the certified PMP in its Local Coastal Program (LCP)." In addition, activities in military ports are subject to federal consistency review by the CCC, affording the State an opportunity to ensure that appropriate NPS pollution prevention and control measures are in place. Ports located in the San Francisco Bay are under the jurisdiction of SF Bay Conservation and Development Commission (SFBCDC) and subject to regulations of the MacAteer-Petris Act (MPA).

2. Impaired 303(d) Lists and TMDLs

Under Section 303(d) of the Clean Water Act, California is required to compile a list of impaired waters that fail to meet applicable water quality standards or that cannot support their designated beneficial uses. This list, called a '303(d)' list is submitted to Congress every two years, and California is required to develop a Total Maximum Daily Load (TMDL) for each pollutant causing impairment to the water bodies that are listed. Over the next five-year period, California is planning to expend significant funds and efforts to develop and implement the TMDLs for these identified water bodies. This process will include TMDL implementation plans that will utilize the MMs identified in California's NPS Program Plan.

3. Watershed Management Initiative (WMI)

Marinas, by nature of their business, are positioned in a *water body*, where the activities of others in the watershed affect water quality in the marina basin. In addition, water quality at any

specific point along a river is influenced by all upstream and upgradient locations in the river's watershed. Marinas located on rivers and reservoirs are potential recipients of the runoff from sources located upstream and along upstream tributaries and from all upgradient land-based activities in the watershed. Lakes are the natural sinks for runoff from activities in their basins, and the water quality in marinas on lakes is potentially influenced by all of the activities in the watershed and activities that occur on the lake. The water quality of marinas in estuaries and coastal waters is similarly influenced by the numerous activities that contribute runoff and pollutants to the water flowing into the marina basin. The runoff from marinas in urban settings is often mixed with runoff from nearby areas because runoff is directed toward the surface waters where marinas are located. Similarly, marinas in watersheds where agriculture is abundant may receive runoff from upland agricultural sources. Marinas can benefit from cooperative environmental protection efforts that involve and educate those who potentially contribute pollution to the surface waters in the watershed where the marina is located and seek responsible, shared solutions to water quality problems. The SWRCB WMI is a program that coordinates these solutions within the SWRCB and the RWQCBs.

4. Oil Pollution Act and Regulations

The Federal Oil Pollution Act (OPA) is a comprehensive prevention, response, liability, and compensation regime for dealing with vessel- and facility-generated discharges of oil or hazardous substances. Under the OPA, any hazardous waste spill from a vessel must be reported by the owner of the vessel and vessel owners are responsible for any costs of a resulting environmental cleanup and any damage claims that might result from the spill. Marinas are responsible for any oil contamination resulting from their facilities, including dumping or spilling of oil or oil-based paint and the use of chemically treated agents.

The Department of Fish and Game's Office of Spill Prevention and Response (OSPR) enforces the laws designed to prevent spills, dispatches units to respond to spills, and investigates spills. OSPR maintains a 24-hour Communications Center headquartered in Sacramento. The Center has the responsibility of dispatching wardens to marine oil spills. Anyone seeing an oil spill or slick is required by law to report the sighting. Reports may be made by telephone to either the Governor's Office of Emergency Services at 1-800-OILS-911, or to OSPR at 1-888-334-2258.

In addition, to assist Small Craft Refueling Dock (a waterside operation, serving primarily small craft of less than 20 meters in length and less than five tons net weight) operators in their spill prevention and response efforts, OSPR conducts voluntary inspections to identify strengths and weaknesses in a system, and – when appropriate – show a dock operator ways to improve his/her ability to prevent and respond to spills. For more information on OSPR's outreach program go to <http://www.dfg.ca.gov/ospr>.

5. Clean Vessel Act Pumpout Grant Program

In 1992, Congress passed the Clean Vessel Act (CVA) to help reduce pollution from vessel sewage discharges into U.S. waters. The Grant Program established by the Act helps fund the construction, renovation, operation, and maintenance of pumpout and dump stations to service pleasure craft. The Grant Program is authorized through 2007. As part of its commitment to provide clean, safe, and enjoyable recreational boating in California, the Department of Boating and Waterways is serving as the State Grant coordinator. The Department also provides boater education programs to promote public awareness about boat sewage and its proper disposal. The Grant Program benefits boaters, who will have more numerous and convenient pumpout facilities to use as a result of the program, and the public and environment as a whole through reductions

of disease-carrying microorganisms contained in sewage discharges and improvement in dissolved oxygen concentrations.

6. California Clean Boating Network

The California Clean Boating Network (established by the California Coastal Commission in 1995) consists of a collaboration of government, environmental, business, boating, and academic organizations working to increase and improve clean boating education efforts in California. There are three chapters of the CCBN, one in Northern California, one in the Central Coast, and one in the Los Angeles region. Each of these chapters meets quarterly. Through the exchange of information and consideration of new trends in clean boating practices, CCBN members increase their ability to educate the boating public about clean boating practices. Members of the CCBN believe that educating boaters about the impacts of boating and about environmentally sound boating techniques can significantly reduce the contribution of pollution from boating to California's waterways. The CCBN maintains a website for clean boating information at www.coastal.ca.gov/ccbn.ccbndx.html and produces a quarterly newsletter about clean boating and clean marinas in California entitled "The Changing Tide".

7. Boating Clean and Green Campaign

The Boating Clean and Green Campaign is an education and outreach program that promotes environmentally sound boating practices to marine business and boaters in California. Most of the funding for the campaign is provided by the CIWMB's Used Oil Program. Started in April 1997, the Campaign conducts clean boating and clean marinas education throughout the state in partnership with many public and private agencies that share a concern about educating boaters about environmentally sound boating practices.

C. OBJECTIVES AND ACTIVITY SUMMARY

The Marinas Category Objectives and agency activities are provided below. Also, please refer to Appendix III for additional clarification of the objectives established for this category.

1. Marinas Category Objectives

The State of California recently undertook a concerted, collaborative process for the development of Category Objectives for the NPS Implementation Plan 2003-2008. Over a period of approximately one year, the Statewide Interagency Coordinating Committee (IACC) and the Marinas and Recreational Boating Workgroup (a subcommittee of the IACC) met frequently to (1) consider the mission of each agency relative to nonpoint source pollution as it relates to marinas and recreational boating; (2) formulate a means of collaboration; and, (3) set overall objectives for the collaborative process. The result of this effort, which will formulate the focus of California relative to Marina and Recreational Boating nonpoint source pollution prevention, are the Marina and Recreational Boating Category Objectives, which are listed below. These Objectives will serve to guide and measure the progress that will be made over the next five years.

- a. Assess implementation and effectiveness of existing standards and develop and enforce standards that will decrease marina and recreational boating's contribution to nonpoint source pollution.

- b. Develop educational programs, training workshops and other outreach services to increase marinas and recreational boater's pollution prevention efforts.
- c. Develop systems to reward marinas for pro-active environmental-friendly activities.
- d. Assess existing environmental services and expand environmental services at marinas that are supportive of clean boating practices.
- e. Develop information on the overall effectiveness of MP implementation on improving water quality.
- f. Continue to improve upon and expand existing interagency coordination to more effectively manage pollution from recreational boaters and marinas.
- g. Continue to assess waterbodies, identify sources of NPS impacts from recreational boaters and marinas and increase inspections.
- h. Develop and implement watershed-based plans, including TMDLs in order to identify and address impacts from recreational boaters and marinas.
- i. Continue educating marina owners and operators about the programs and funds that are available to help them comply with local, state, and federal regulations.

2. Activity Summary for California

The activities listed in Table VB address all of the Marinas MMs. The primary focus of the listed activities is to prevent discharges of waste oil, sewage, petroleum, solid waste and hazardous substances into State waters, either from surface runoff, improper boat cleaning/maintenance activities, lack of disposal facilities or improper maintenance of existing facilities at marinas. In addition, implementing agencies will rely on education and outreach efforts to marina owners and operators and the boating public to provide information on NPS pollution problems and management practices that can be implemented to prevent or control improper disposal of pollutants into State waters.

Table VB
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES

Marinas

Management Measure: 4.1C Assessment, Siting, and Design - Water Quality Assessment

Process Element	Activity Name	Activity Objective and Description	Agency	Location	Success Criteria	Schedule
Pre-Implementation 15.003-2	Assess effectiveness of current vessel sewage waste programs	<p>Objective: Public awareness; Coastkeeper outreach; up-dated facilities.</p> <p>Description: Assess effectiveness of current vessel sewage waste programs in selected regions in Lower Newport Bay through public awareness; Coastkeeper outreach; updated facilities. Requirement of the Newport Bay Fecal Coliform TMDL</p>	RWQCB-8	Lower Newport Bay	Lower bacteria inputs from vessels, pumpout stations, and marinas is the ultimate goal.	7/1/03 to 6/30/08
Pre-Implementation 4.059-1	Marina Technical Advisory Committee Participation	<p>Objective: To participate on a technical advisory committee for a marina sampling program.</p> <p>Description: Design and implement marina water quality sampling program under BCDC grant program</p>	RWQCB-2	San Francisco Bay	Development and implementation of monitoring program	7/1/03 to 6/30/06
Pre-Implementation 4.060	Marinas and Boating Workgroup Participation	<p>Objective: To participate in a boating and marina workgroup, attend the meetings and give input.</p> <p>Description: Attend meetings on implementing nonpoint source activities in San Francisco Bay related to marinas and recreational boating</p>	RWQCB-2	San Francisco Bay	Development of working relationships and recommendations for nonpoint source activities	7/1/03 to 6/30/06

Table VB
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES

Pre-Implementation 6.072	Res. No. 02-007 SEP List City of San Buenaventura	Objective: This study will identify a means to improve coastal water quality presently affecting popular swimming beaches in the City of Ventura. Description: Coastal Water Quality Improvement Study: The purpose of this study is to find an effective solution to improve coastal water quality and to prepare preliminary design plans for implementing the solution.	RWQCB-4	San Buenaventura	Completed preliminary design and plans.	9/23/02 to	9/23/03
Pre-Implementation 5.401	Assist dredge project evaluation for impacts	Objective: Prevent water quality impacts associated with dredge activities Description: Review and comment on proposed dredge activities, activities performed through Regional Board's 401 Water Quality Certification program.	RWQCB-3	Regionwide RB3	Adequately conditioned dredge projects	7/1/03 to	6/30/08
Implement 2.312-1	Water Quality Indicator Test	Objective: Develop a rapid water quality indicator test as an indicator of public health risk. Description: Pursue a rapid water quality analytical test (i.e., less than 8 hours) for measurement of indicator bacteria for human pathogens.	SWRCB	Statewide	Development of a less than 8 hour test that is easy to conduct and of comparable cost to current tests.	8/30/02 to	7/31/03
Track/Monitor 4.061-1	Marina and Houseboat Areas Sampling	Objective: Insure compliance with vessel waste no-discharge zone in Richardson Bay Description: Conduct annual monitoring for coliform in marinas and houseboat areas along Richardson Bay	RWQCB-2	Marin County	Compliance with water quality objectives for coliform	7/1/03 to	12/31/08

Table VB
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES

Track/Monitor 4.062-3	Manage contract for Green Marinas program	<p>Objective: To oversee contract for Green Marinas project to sample and assess marinas for pollution grant.</p> <p>Description: Grant project to develop voluntary performance standards, educate boaters, do water quality monitoring, and to determine pollutant sources (marina vs. stormwater runoff).</p>	RWQCB-2	San Francisco Bay	Development of performance standards, completion of water quality monitoring	7/1/03 to 6/30/05
--------------------------	--	--	---------	----------------------	--	-------------------

Table VB
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES

Management Measure: 4.1E Assessment, Siting, and Design - Storm Water Runoff						
Process Element	Activity Name	Activity Objective and Description	Agency	Location	Success Criteria	Schedule
Implement 19.010-2	Marinas and Recreational Boating	Objective: To establish and maintain used oil/household hazardous waste collection facilities at marinas and educate boaters about the proper management and disposal of used oil/household hazardous waste they generate. Description: Provide grant funds to local jurisdictions and nonprofits to establish used oil/hhw collection facilities at marinas. Provide funds to the California Coastal Commission to manage the Clean and Green Boater Education Campaign and map the location of all marina used oil/hhw collection facilities throughout the state.	CIWMB	Statewide	Number of used oil/hhw collection facilities established at marinas	1/1/03 to 6/30/08
Implement 6.043-2	TMDL Implementation for Marina del Rey-Pathogens	Objective: BMP implementation Description: MP Implementation	RWQCB-4	Marina del Rey	Delisting from 303 (d) list	4/1/03 to 8/8/13
Implement 6.045	TMDL Implementation for Marina del Rey-Toxics	Objective: MP Implementation Description:	RWQCB-4	Marina del Rey	Delisting on 303 (d) list	4/15/03 to 12/4/13

Table VB
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES

Track/Monitor 6.017	Effects of Marine/Estuarine Hydrodynamics on Pollutant Transport	<p>Objective: The projects specific goal is to develop a hydrodynamic model that can be used to accurately track pollutant transport through the estuarine and marine portions of the Dominguez Channel.</p> <p>Description: Develop a hydrodynamic model to track pollutant transport through estuarine and marine portions of Dominguez Watershed in support of setting pollutant loading allocations in TMDLs. A large portion of the money goes to field work to investigate currents and flushing. A highly impaired watershed but utilized by endangered species. Large stakeholder group giving support.</p>	RWQCB-4	Los Angeles County	Hydrodynamic Model Development.	7/1/03 to 6/30/08
------------------------	--	---	---------	-----------------------	------------------------------------	-------------------

Table VB
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES

Management Measure: 4.1F Assessment, Siting, and Design - Fueling Station Design							
Process Element	Activity Name	Activity Objective and Description	Agency	Location	Success Criteria	Schedule	
Implement 2.308	Consider adopting regulations in response to any new legislation	<p>Objective: Prevent petroleum releases from marina fueling systems</p> <p>Description: In response to any new legislation, develop and adopt regulations specific to marina fueling operations. Consider requiring underground and aboveground storage tank marina fueling systems to be constructed in accordance with soon to be published Underwriters Laboratories Standards.</p>	SWRCB	Statewide	Underwriters Laboratories Standards are adopted in response to any new legislation.	10/1/03 to	1/1/06
Implement 2.309	Develop Technical and Program Guidance	<p>Objective: Prevent petroleum releases from marina fueling systems</p> <p>Description: Develop technical and program guidance for local agency and Regional Board inspectors to consistently implement the Underwriters Laboratories standards and marina fueling system operation requirements.</p>	SWRCB	Statewide	Local Agency and Regional Board inspectors consistently implement standards and inspection requirements	1/1/05 to	1/1/06
Implement 2.310	Provide statewide training and inspection assistance	<p>Objective: Ensure consistent statewide compliance with fueling system regulations.</p> <p>Description: Develop and provide statewide training and inspection assistance to local agency and Regional Board staff.</p>	SWRCB	Statewide	Local agency and Regional Board staff receive training and inspection assistance.	1/1/06 to	1/1/08

Table VB
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES

Management Measure: 4.1G Assessment, Siting, and Design - Sewage Facilities						
Process Element	Activity Name	Activity Objective and Description	Agency	Location	Success Criteria	Schedule
Pre-Implementation 15.003-1	Assess effectiveness of current vessel sewage waste programs	<p>Objective: Public awareness; Coastkeeper outreach; upodated facilities.</p> <p>Description: Assess effectiveness of current vessel sewage waste programs in selected regions in Lower Newport Bay through public awareness; Coastkeeper outreach; updated facilities. Requirement of the Newport Bay Fecal Coliform TMDL.</p>	RWQCB-8	Lower Newport Bay	Lower bacteria inputs from vessels, pumpout stations, and marinas is the ultimate goal.	7/1/03 to 6/30/08
Pre-Implementation 2.300	Establish regional standards for number of sewage facilities	<p>Objective: Reduce disposal of raw sewage into coastal and inland waters from recreational boats.</p> <p>Description: Establish regional standards for the minimum number of sewage facilities (e.g., fixed, mobile, and/or floating pump outs, dump stations, and restrooms) per recreational vessel in the Los Angeles Region's Bays and Harbors</p>	SWRCB	Regionwide RB4	Completion of Assessment Report and Recommendations	5/15/03 to 3/31/05
Pre-Implementation 2.301	Establish regional standards for sewage disposal facilities.	<p>Objective: Reduce disposal of raw sewage into coastal and inland waters from recreational boats.</p> <p>Description: Establish regional standards for minimum number of sewage facilities (e.g., fixed, mobile, and/or floating pump outs, dump stations, and restrooms) per recreational vessel in RWQCB 8.</p>	SWRCB	Newport and Huntington Bays	Completion of Assessment Report and Recommendations	3/31/03 to 6/30/04

Table VB
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES

Pre-Implementation 2.302	Establish regional standards for sewage disposal facilities.	Objective: Reduce disposal of raw sewage into coastal and inland waters from recreational boats. Description: Establish regional standards for minimum number of sewage facilities (e.g., fixed, mobile, and/or floating pump outs, dump stations, and restrooms) per recreational vessel in RWQCB 2.	SWRCB	Tomales, San Francisco and Richardson Bays	Completion of Assessment Report and Recommendations	5/15/03 to 3/31/05
Pre-Implementation 2.316-1	Identify marinas in water bodies on CWA 303(d) list/bacteria	Objective: Identify water bodies potentially affected by sewage waste discharges at marinas Description: Identify water bodies on CWA Section 303(d) list that are listed for bacteria (or other indicators related to vessel sewage) and that are potentially affected by discharges at marinas.	SWRCB	Statewide	Identification of marinas affected by sewage waste discharges.	7/1/03 to 6/30/08
Pre-Implementation 32.002-1	Identify potential funding for pumpout installation	Objective: Department will continue to participate in federal Clean Vessel Act program. Description: Identify future sources of funding for the installation of pumpout facilities.	DBW	Statewide	Identification of funding sources	7/1/03 to 6/30/08
Pre-Implementation 4.064	Marina Minimum Standards for Sewage Facilities	Objective: Establish minimum standards defining adequate number of pumpouts, dump stations or restroom facilities. Description: Establish standards, work with State Board and DBW on determining boating sewerage needs in Tomales Bay and San Francisco Bay.	RWQCB-2	San Francisco Bay Region	Developed standards, identification of pumpout locations	7/1/03 to 6/30/05

Table VB
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES

Pre-Implementation 4.065-1	Tomales Bay sewage planning	Objective: Provide input and recommendations on sewage facilities for Tomales Bay Description: Work with National Park Service, State Parks, and County Open Space through Tomales Bay Shellfish Technical Advisory Committee to provide input and recommendations on sewage facilities for Tomales Bay	RWQCB-2	Marin County	Determination of need and location for sewage facilities	7/1/03 to 6/30/05
Pre-Implementation 4.066-1	Tomales Bay Evaluation of Need for No-Discharge Zone	Objective: To determine the need for a "no-discharge zone" in Tomales Bay. Description: Evaluate the need and requirements for establishing a vessel waste no-discharge zone in Tomales Bay	RWQCB-2	Marin County	Determination of need and requirements	7/1/03 to 6/30/05
Pre-Implementation 4.093-2	TMDL for Pathogens, Richardson Bay	Objective: Develop TMDL for pathogens in Richardson Bay Description: Develop TMDL for pathogens from marinas, boating, urban runoff in Richardson Bay. Richardson Bay is a designated no-discharge zone by EPA	RWQCB-2	San Francisco Bay	Reports and Basin Plan amendment	7/1/04 to 6/30/08
Pre-Implementation 6.039	Marinas-Pump Out	Objective: Develop policy concerning the number (ratio) of pumpout stations per slips in a marinas Description: Assessment of current conditions of pump-out facilities and provide pump out ratio for marinas	RWQCB-4	RB4 Marinas	Establish pumpout ratio guidelines for marina operators	7/1/03 to 6/30/08
Pre-Implementation 2.313	Evaluating use of enterococcus as an indicator	Objective: Evaluate use of enterococcus as an indicator of public health risk. Description: Evaluate the utility of switching from total and fecal coliform indicators to enterococcus as an indicator of public health risk.	SWRCB	Statewide	Decision made on which indicators to use to assess public health risks	7/30/03 to 7/30/05

Table VB
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES

Implement 2.304-1	Require installation of additional sewage disposal facilities	Objective: Reduce disposal of raw sewage into coastal waters from recreational boats. Description: Require installation of an adequate number of sewage facilities in RWQCB 4 Marinas and Harbors	SWRCB	Regionwide RB4	Installation of sewage disposal facilities	5/1/05 to 12/31/05
Implement 2.305-1	Require installation of additional sewage disposal facilities	Objective: Reduce disposal of raw sewage into coastal and inland waters from recreational boats. Description: Require installation of an adequate number of sewage facilities in RWQCB 8 for Newport and Huntington Bays.	SWRCB	Newport and Huntington Bays	Installation of sewage disposal facilities	7/1/03 to 1/1/04
Implement 2.306-1	Require installation of additional sewage facilities	Objective: Reduce disposal of raw sewage into coastal and inland waters from recreational boats. Description: Require installation of an adequate number of sewage facilities in RWQCBs 2 for Tomales Bay and San Francisco Bay, including Richardson Bay	SWRCB	Tomales, San Francisco and Richardson Bays	Completion of Report and Recommendations and Order requiring installation of sewage disposal facilities	5/1/05 to 12/31/05
Implement 2.312-2	Water Quality Indicator Test	Objective: Develop a rapid water quality indicator test as an indicator of public health risk. Description: Pursue a rapid water quality analytical test (I.e., less than 8 hours) for measurement of indicator bacteria for human pathogens.	SWRCB	Statewide	Development of a less than 8 hour test that is easy to conduct and of comparable cost to current tests.	8/30/02 to 7/31/03

Table VB
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES

Implement 32.001-1	Continue Education Programs	Objective: Dept. will continue to distribute education materials to marina operators and boating public. Dept. will participate in public boating forums and marine industry meetings and conferences. Provide ongoing application assistance to marina owners and operators for pumpout grants. Description: Continue educational program aimed at marina operators to promote pumpout facilities and to get commitment to install new pumpouts.	DBW	Statewide	Distribution of education materials	7/1/03 to 6/30/08
Implement 32.004-1	Use financial incentives to meet minimum standards	Objective: Meet standards statewide for marinas and launching facilities by 2008. Description: Meet minimum guidelines for pumpout stations, as established by DBW, through financial incentives. (ie: grants to marinas and launch ramps)	DBW	Statewide	Minimum standards are met	7/1/03 to 6/30/08
Track/Monitor 4.061-2	Marina and Houseboat Areas Sampling	Objective: Insure compliance with vessel waste no-discharge zone in Richardson Bay Description: Conduct annual monitoring for coliform in marinas and houseboat areas along Richardson Bay	RWQCB-2	Marin County	Compliance with water quality objectives for coliform	7/1/03 to 12/31/08
Track/Monitor 4.062-2	Manage contract for Green Marinas program	Objective: To oversee contract for Green Marinas project to sample and assess marinas for pollution grant. Description: Grant project to develop voluntary performance standards, educate boaters, do water quality monitoring, and to determine pollutant sources (marina vs. stormwater runoff).	RWQCB-2	San Francisco Bay	Development of performance standards, completion of water quality monitoring	7/1/03 to 6/30/05

Table VB
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES

Management Measure: 4.1H Assessment, Siting, and Design - Waste Management Facilities						
Process Element	Activity Name	Activity Objective and Description	Agency	Location	Success Criteria	Schedule
Implement 19.010-1	Marinas and Recreational Boating	<p>Objective: To establish and maintain used oil/household hazardous waste collection facilities at marinas and educate boaters about the proper management and disposal of used oil/household hazardous waste they generate.</p> <p>Description: Provide grant funds to local jurisdictions and nonprofits to establish used oil/hhw collection facilities at marinas. Provide funds to the California Coastal Commission to manage the Clean and Green Boater Education Campaign and map the location of all marina used oil/hhw collection facilities throughout the state.</p>	CIWMB	Statewide	Number of used oil/hhw collection facilities established at marinas	1/1/03 to 6/30/08
Implement 2.321-1	Coordinate efforts to reduce plastics pollution	<p>Objective: Prevent or reduce plastics pollution in the environment.</p> <p>Description: Participate in Interagency working group to investigate potential ways in which state governmental agencies can work towards reducing plastics pollution in the environment. Participate in workshop(s) with agency heads to ensure information developed is consistent.</p>	SWRCB	Statewide	Decrease in littered trash as measured by tons of trash collected (I.e., Los Angeles County) Trash receptacles are covered or enclosed	7/1/03 to 6/30/08
Implement 9.009-2	Marinas and Boating	<p>Objective: Outreach, education and Implementation of BMPs and engineering to control waste and fuel related to boating and marinas</p> <p>Description: Implement BMPs related to waste and fuel management for boating and marinas.</p>	RWQCB-5R	Sacramento and San Joaquin Watersheds	MP's implemented.	7/1/03 to 6/30/08

Table VB
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES

Management Measure: 4.2 Operation and Maintenance						
Process Element	Activity Name	Activity Objective and Description	Agency	Location	Success Criteria	Schedule
Pre-Implementation 16.402-1	Shelter Island Metals TMDL Development	Objective: To develop Shelter Island Yacht Basin metals TMDL Description: To complete the TMDL, and Basin Plan Amendment, acquire approval of both by RWQCB and SWRCB, as well as USEPA.	RWQCB-9	HU 908	adopted TMDL	7/1/03 to 6/30/08
Implement 16.403-1	Shelter Island Metals TMDL Implementation	Objective: To implement Shelter Island Yacht Basin metals TMDL Description: To perform the coordination and enforcement efforts necessary to implement the TMDL.	RWQCB-9	HU 908	Restoration of beneficial uses and water quality objectives in Shelter Island Yacht Basin.	7/1/03 to 6/30/08
Management Measure: 4.2A Operation and Maintenance - Solid Waste Control						
Process Element	Activity Name	Activity Objective and Description	Agency	Location	Success Criteria	Schedule
Implement 2.321-2	Coordinate efforts to reduce plastics pollution	Objective: Prevent or reduce plastics pollution in the environment. Description: Participate in Interagency working group to investigate potential ways in which state governmental agencies can work towards reducing plastics pollution in the environment. Participate in workshop(s) with agency heads to ensure information developed is consistent.	SWRCB	Statewide	Decrease in littered trash as measured by tons of trash collected (I.e., Los Angeles County) Trash receptacles are covered or enclosed	to 6/30/08

Table VB
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES

Management Measure: 4.2B Operation and Maintenance - Fish Waste Control						
Process Element	Activity Name	Activity Objective and Description	Agency	Location	Success Criteria	Schedule
Implement 28.119	Fish Cleaning Stations Maintenance	Objective: Maintain fish cleaning stations to prevent pollution impacts Description: Fish cleaning stations require special attention to maintain them functioning and prevent pollution problems. An additional person year allocation of 2.5 years is needed to accomplish this program. This is an ongoing annual cost resulting from the construction of these needed facilities.	DPR	Statewide	Fish stations maintained	7/1/03 to 6/30/08

Table VB
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES

Management Measure: 4.2D Operation and Maintenance - Petroleum Control						
Process Element	Activity Name	Activity Objective and Description	Agency	Location	Success Criteria	Schedule
Pre-Implementation 10.079-1	The Water You Play in is the Water You Drink	<p>Objective: Reduce discharge of pollutants from marinas in the Delta.</p> <p>Description: Target the cumulative impacts of pathogens (overboard sewage discharges and pet waste), petroleum hydrocarbons (MTBE containing fuel, oil, contaminated bilge water, and solvents), and other liquid wastes (engine and hull maintenance and general marina activities) generated during recreational boating activities.</p>	RWQCB-5S	San Joaquin Delta	Reduction of pollutants from Marina discharges	7/1/03 to 6/30/08
Pre-Implementation 11.23	WQ Impacts to L. Tahoe and Donner L. from PAHs	<p>Objective: To evaluate the environmental impacts associated with PAHs in Lake Tahoe and Donner Lake</p> <p>Description: Conduct ambient monitoring, phototox assessments, emissions testing, regulatory assessment</p>	RWQCB-6	El Dorado, Nevada Counties	final report, executive summary, management measure recommendations	6/20/01 to 3/31/03
Pre-Implementation 2.322	Assess Boat Design Features and Recommend Improvements	<p>Objective: Reduce petroleum releases from boat during operation and during fueling activities.</p> <p>Description: Assess boat design and work with boat manufacturers to reduce or eliminate petroleum releases from bilge filtration systems and from boats during fueling activities. Changes are needed at the nozzle (nozzles don't always fit and boat fueling ports are not of a consistent size) and at boat fueling access points. Make recommendations for new laws, if necessary.</p>	SWRCB	Statewide	Design changes made by boat manufacturers prevent spillage of fuel during fueling activities and bilge filtration systems prevent disposal of oily waste water from bilge.	7/1/03 to 6/30/08

Table VB
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES

Implement 9.009-1	Marinas and Boating	Objective: Outreach, education and Implementation of BMPs and engineering to control waste and fuel related to boating and marinas Description: Implement BMPs related to waste and fuel management for boating and marinas.	RWQCB-5R	Sacramento and San Joaquin Watersheds	MP's implemented.	7/1/03 to 6/30/08
----------------------	---------------------	---	----------	---------------------------------------	-------------------	-------------------

Management Measure: 4.2E Operation and Maintenance - Boat Cleaning and Maintenance

Process Element	Activity Name	Activity Objective and Description	Agency	Location	Success Criteria	Schedule
Pre-Implementation 10.079-3	The Water You Play in is the Water You Drink	Objective: Reduce discharge of pollutants from marinas in the Delta. Description: Target the cumulative impacts of pathogens (overboard sewage discharges and pet waste), petroleum hydrocarbons (MTBE containing fuel, oil, contaminated bilge water, and solvents), and other liquid wastes (engine and hull maintenance and general marina activities) generated during recreational boating activities.	RWQCB-5S	San Joaquin Delta	Reduction of pollutants from Marina discharges	7/1/03 to 6/30/08
Implement 2.319	Identify marinas in water bodies on CWA Section 303(d) list	Objective: Identify water bodies potentially affected by boat cleaning and maintenance activities at marinas. Description: Identify water bodies on CWA Section 303(d) list that are listed for copper, tributyltin, detergents (or other indicators related to boat cleaning and maintenance) and that are potentially affected by discharges at marinas.	SWRCB	Statewide	Identification of impacted marinas	7/1/03 to 6/30/08

Table VB
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES

Management Measure: 4.2F Operation and Maintenance - Maintenance of Sewage Facilities						
Process Element	Activity Name	Activity Objective and Description	Agency	Location	Success Criteria	Schedule
Pre-Implementation 10.079-2	The Water You Play in is the Water You Drink	<p>Objective: Reduce discharge of pollutants from marinas in the Delta.</p> <p>Description: Target the cumulative impacts of pathogens (overboard sewage discharges and pet waste), petroleum hydrocarbons (MTBE containing fuel, oil, contaminated bilge water, and solvents), and other liquid wastes (engine and hull maintenance and general marina activities) generated during recreational boating activities.</p>	RWQCB-5S	San Joaquin Delta	Reduction of pollutants from Marina discharges	7/1/03 to 6/30/08
Pre-Implementation 2.314	Assess Enforcement Authorities	<p>Objective: Assess enforcement authorities to ensure sewage disposal facilities are operational and maintained</p> <p>Description: Assess whether or not adequate enforcement powers/authorities exist for and are being implemented by federal, State, and/or local enforcement personnel. Make recommendations for new laws if needed.</p>	SWRCB	Statewide by Region	Completed assessment with recommendations	7/1/03 to 6/30/08
Pre-Implementation 2.316-2	Identify marinas in water bodies on CWA 303(d) list/bacteria	<p>Objective: Identify water bodies potentially affected by sewage waste discharges at marinas</p> <p>Description: Identify water bodies on CWA Section 303(d) list that are listed for bacteria (or other indicators related to vessel sewage) and that are potentially affected by discharges at marinas.</p>	SWRCB	Statewide	Data provided to marina operators (port captains, harbormasters, lessors, marina owners, etc.) And the public.	7/1/03 to 6/30/08

Table VB
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES

Pre-Implementation 32.002-2	Identify potential funding for pumpout maintenance and installation	Objective: Department will continue to participate in federal Clean Vessel Act program. Description: Identify future sources of funding for the maintenance and installation of pumpout facilities.	DBW	Statewide	Funding sources identified	7/1/03 to 6/30/08
Pre-Implementation 4.093-1	TMDL for Pathogens, Richardson Bay	Objective: Develop TMDL for pathogens in Richardson Bay Description: Develop TMDL for pathogens from marinas, boating, urban runoff in Richardson Bay. Richardson Bay is a designated no-discharge zone by EPA	RWQCB-2	San Francisco Bay	Reports and Basin Plan amendment	7/1/04 to 6/30/08
Implement 2.304-2	Require installation of additional sewage disposal facilities	Objective: Reduce disposal of raw sewage into coastal waters from recreational boats. Description: Require installation of an adequate number of sewage facilities in RWQCB 4 Marinas and Harbors	SWRCB	Regionwide RB4	Installation of sewage disposal facilities	5/1/05 to 12/31/05
Implement 2.305-2	Require installation of additional sewage disposal facilities	Objective: Reduce disposal of raw sewage into coastal and inland waters from recreational boats. Description: Require installation of an adequate number of sewage facilities in RWQCB 8 for Newport and Huntington Bays.	SWRCB	Newport and Huntington Bays	Installation of sewage disposal facilities	7/1/03 to 1/1/04
Implement 2.306-2	Require installation of additional sewage facilities	Objective: Reduce disposal of raw sewage into coastal and inland waters from recreational boats. Description: Require installation of an adequate number of sewage facilities in RWQCBs 2 for Tomales Bay and San Francisco Bay, including Richardson Bay	SWRCB	Tomales, San Francisco and Richardson Bays	Completion of Report and Recommendations and Order requiring installation of sewage disposal facilities	5/1/05 to 12/31/05

Table VB
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES

Implement 32.004-2	Use financial incentives to meet minimum standards	Objective: Meet standards statewide for marinas and launching facilities by 2008. Description: Meet minimum guidelines for pumpout stations, as established by DBW, through financial incentives. (ie: grants to marinas and launch ramps)	DBW	Statewide	Minimum standards are met	7/1/03 to 6/30/08
Implement 6.055	TMDL Implementation for LA Harbor Beaches	Objective: MP implementation Description: Develop TMDL implementation plan and reschedule of implementation	RWQCB-4	Los Angeles County	Delisting on 303 (d) list	7/1/03 to 6/30/08
Track/Monitor 28.112	Recreational Boating sewage holding tank Inspections	Objective: Monitor Houseboat sewage holding tanks and associated piping to assure materials are not entering waterway illegally. Description: Underwater inspection of marina to determine if any houseboats or other boats have damaged or non functional sewage collecting and storage units.	DPR	Northern Buttes District (Lake Oroville)	Identifying defective units or confirming that all are functioning properly.	7/1/03 to 6/30/08

Management Measure: 4.2G Operation and Maintenance - Boat Operation

Process Element	Activity Name	Activity Objective and Description	Agency	Location	Success Criteria	Schedule
Pre-Implementation 4.066-2	Tomales Bay Evaluation of Need for No-Discharge Zone	Objective: To determine the need for a "no-discharge zone" in Tomales Bay. Description: Evaluate the need and requirements for establishing a vessel waste no-discharge zone in Tomales Bay	RWQCB-2	Marin County	Determination of need and requirements	7/1/03 to 6/30/05

Table VB
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES

Management Measure: 4.3A Education/Outreach - Public Education						
Process Element	Activity Name	Activity Objective and Description	Agency	Location	Success Criteria	Schedule
Pre-Implementation 32.005	Assess existing pollution prevention and control programs	Objective: Dept. to participate in the Clean Vessel Act and Clean Boating Networks. Description: Assess existing pollution prevention and control programs regionally and statewide.	DBW	Statewide	Completed assessments	7/1/03 to 6/30/08
Pre-Implementation 4.059-2	Marina Technical Advisory Committee Participation	Objective: To participate on a technical advisory committee for a marina sampling program. Description: Design and implement marina water quality sampling program under BCDC grant program	RWQCB-2	San Francisco Bay	Development and implementation of monitoring program	7/1/03 to 6/30/06
Pre-Implementation 16.402-2	Shelter Island Metals TMDL Development	Objective: To develop Shelter Island Yacht Basin metals TMDL Description: To complete the TMDL, and Basin Plan Amendment, acquire approval of both by RWQCB and SWRCB, as well as USEPA.	RWQCB-9	HU 908	adopted TMDL	7/1/03 to 6/30/08
Implement 11.9	"On the Water, Hands On" Environmental Education	Objective: Educate the Lake Tahoe community on issues concerning conservation of Lake Tahoe and water quality problems Description: Conduct hands-on classes on Lake Tahoe which will cover history and facts, research findings, secchi disk readings, ecosystems and pollution prevention	RWQCB-6	El Dorado County	increased number of class participants	12/1/02 to 6/1/05

Table VB
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES

Implement 16.403-2	Shelter Island Metals TMDL Implementation	Objective: To implement Shelter Island Yacht Basin metals TMDL Description: To perform the coordination and enforcement efforts necessary to implement the TMDL.	RWQCB-9	HU 908	Restoration of beneficial uses and water quality objectives in Shelter Island Yacht Basin.	7/1/03 to 6/30/08
Implement 19.010-3	Marinas and Recreational Boating	Objective: To establish and maintain used oil/household hazardous waste collection facilities at marinas and educate boaters about the proper management and disposal of used oil/household hazardous waste they generate. Description: Provide grant funds to local jurisdictions and nonprofits to establish used oil/hhw collection facilities at marinas. Provide funds to the California Coastal Commission to manage the Clean and Green Boater Education Campaign and map the location of all marina used oil/hhw collection facilities throughout the state.	CIWMB	Statewide	Number of used oil/hhw collection facilities established at marinas	1/1/03 to 6/30/08

Table VB
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES

Implement 22.010	Boating Clean and Green Campaign	Objective: Continue to promote the education of marina operators and boaters on various MMs related to marinas and recreational boating with the focus on petroleum control. Description: Co-host the Clean Marinas Conference. Produce approximately 5,000 boater kits annually. Update Tidebooks. Conduct 5 to 7 Dockwalker trainings annually. Partner with local agencies to provide local Dockwalkers support. Mapping environmental services for boaters as prelude to needs assessment. Continue to facilitate CCBN. Produce two editions of Norther California CCBN newsletter insert annually. Promote use of the California Clean Marinas Guidebook.	CCC	California coastal marinas	Dockwalker training sessions. Development and distribution of boater kits and posting of educational materials at marinas. Conference and training evaluations conducted.	7/1/03 to 6/30/08
Implement 32.006	Post educational information at boating facilities	Objective: Posting of NPS information in existing and new displays. Description: Post-educational information at boat ramps and other areas.	DBW	Statewide	Information posted at boating facilities	7/1/03 to 6/30/08
Implement 32.007	Continue NPS education for Boating Law Enforcement Staff	Objective: Continuation of NPS pollution element in Boating Law enforcement training. Description: Department to continue to include NPS education component to Boating Law Enforcement as a part of ongoing training.	DBW	Statewide	Staff adequately trained in NPS program	7/1/03 to 6/30/08

Table VB
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES

Implement 36.010	Boating Clean & Green Program	<p>Objective: Promote increased education of marina operators, owners and boaters in the San Francisco Bay area on environmentally sound boating practices.</p> <p>Description: Participate in CCBN, review and comment on work products such as the California Clean Marinas Guidebook; Participate in Dock Walker program and trainings; Provide technical assistance to marinas, and collaborate with California Marina mapping project. Additional work after 12/31/03 is contingent on receiving outside funding and on continuation of the program.</p>	BCDC	San Francisco Bay	Hold and participate in meetings and Dock Walker training; Participate in Marina Mapping Project.	7/1/03 to 6/30/08
Track/Monitor 4.062-1	Manage contract for Green Marinas program	<p>Objective: To oversee contract for Green Marinas project to sample and assess marinas for pollution grant.</p> <p>Description: Grant project to develop voluntary performance standards, educate boaters, do water quality monitoring, and to determine pollutant sources (marina vs. stormwater runoff).</p>	RWQCB-2	San Francisco Bay	Development of performance standards, completion of water quality monitoring	7/1/03 to 6/30/05

Table VB
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES

Management Measure: All- All Marinas Measures						
Process Element	Activity Name	Activity Objective and Description	Agency	Location	Success Criteria	Schedule
Pre-Implementation 2.317	Assess existing enforcement powers	<p>Objective: Assess existing enforcement powers and make recommendations for new laws if needed.</p> <p>Description: Assess whether or not adequate enforcement powers exist for and are being implemented by federal, State, and/or local enforcement personnel.</p>	SWRCB	Statewide	Completed Enforcement Powers Assessment and Introduction of new legislation, if needed.	7/1/03 to 6/30/08
Pre-Implementation 36.002	Pilot SF Bay Marina Water Quality Study	<p>Objective: Establish baseline information, through literature review, data compilation and field sampling, on the condition of selected marinas in the San Francisco Bay regarding selected pollutants, to provide a better understanding of existing water and sediment quality conditions at marinas in SF Bay, and to guide BCDC and other agencies whether additional controls, education programs, and/or expanded marina monitoring programs are warranted.</p> <p>Description: Develop and implement pilot marina water and sediment quality sampling study at select SF Bay marinas. Any additional work performed after June 2004 is contingent on receiving outside funding.</p>	BCDC	San Francisco Bay	Data on water and sediment quality at select marinas and presence or absence of pollutants.	8/15/02 to 8/15/04

Table VB
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES

Pre-Implementation 36.003	SF Bay Marina and Recreational Boating NPS Task Force Mtg.	<p>Objective: Provide a forum for interested parties to jointly address marina related NPS issues in SF Bay; create a public advisory body and scientific body to guide the development and implementation of a pilot marina water quality study.</p> <p>Description: Hold quarterly (or as scheduled) task force and TAC meetings in SF staffed by NOAA Coastal Fellow. Any additional work performed after June 2004 is contingent on receiving outside funding.</p>	BCDC	San Francisco Bay	Task force and TAC meetings held	9/17/02 to 8/15/04
Pre-Implementation 36.009	Green Marinas Project Support and Assistance	<p>Objective: Help SF BayKeeper carry out the Green Marinas project in SF Bay, which will help implement MMs for marina education and voluntary source reduction.</p> <p>Description: Working with the RWQCB-2, review work products and coordinate pathogen monitoring portion of the project with BCDC's pilot marina sampling study (e.g. help define criteria for which marinas to monitor). Any additional work performed after June 2004 is contingent on receiving outside funding.</p>	BCDC	San Francisco Bay	Support and assistance provided for duration of project	7/15/03 to 2/28/06
Pre-Implementation 16.401	Marina Discharge Regulation	<p>Objective: To increase the enforcement of Marina pollutant discharges by developing NPDES permits for Marinas.</p> <p>Description: Go the the necessary process to develop first-time NPDES permits for marinas in San Diego Region</p>	RWQCB-9	Region 9 Coastal Waters	Completed NPDES permit for Marinas	7/1/03 to 6/30/08

Table VB
ACTIVITY SUMMARIES FOR NPS LAND USE CATEGORIES

Implement 2.311	Marina and Recreational Boating Workgroup Meetings	Objective: Develop partnerships and coordinate activities with those State agencies who are responsible for implementing Marinas and Recreational Boating Management Measures. Description: Organize and conduct semi-monthly workgroup meetings to determine ways to effectively and efficiently implement the Marinas and Recreational Boating Management Measures.	SWRCB	Statewide	Number of workgroup meetings	2/7/02 to 6/30/08
Report 22.014	California Clean Marinas Guidebook	Objective: Educate marina operators on all appropriate operation and maintenance management practices. Lay the groundwork for a Clean Marina Recognition Program. Description: Engage marina operators in revising the first draft of the guidebook. Release the second draft for comment. Revise the draft guidebook according to comments and finalize layout and design. Print for distribution. Promote use of the guidebook if funding is available.	CCC	California coast	Full participation of stakeholders in the development process. Completion of document.	7/1/03 to 6/30/04
Report 36.004	SF Bay Plan Recreation- Marinas NPS Report	Objective: Identify whether policy changes to the Bay Plan (Recreation section-Marinas) or other programs, controls and/or expanded monitoring are warranted to address NPS pollution. Description: Based on results of marina water quality pilot study, review SF Bay Plan Recreation findings and policies pertaining to marinas and NPS and prepare a report that includes recommendations on NPS pollution controls. Any additional work performed after June 2004 is contingent on receiving outside funding.	BCDC	San Francisco Bay	Generate report	1/1/04 to 8/15/04